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CLAIMS:

5   What is claimed is:

1.   A logically partitioned data processing system,
comprising:
    a plurality of logical partitions;
10   a plurality of operating systems, each assigned to a
separate one of the plurality of logical partitions;
    a plurality of assignable resources, wherein each of
the plurality of assignable resources is assigned to one
of the plurality of logical partitions;
15   a hypervisor, wherein the hypervisor emulates shared
resources and provides a virtual copy of the shared
resources to each of the plurality of logical partitions.

2.   The logically partitioned data processing system as
20   recited in claim 1, wherein the shared resources comprise
an operator panel.

3.   The logically partitioned data processing system as
recited in claim 1, wherein the shared resources comprise
25   a system console.

4.   The logically partitioned data processing system as
recited in claim 1, wherein the hypervisor receives a
system message from one of the plurality of operating
30   system images, appends an operating system identity to
the message to produce a new message, and sends the new

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message to an external data processing system.

5.   The logically partitioned data processing system as recited in claim 1, wherein instructions for executing the hypervisor are contained within firmware.

6.   The logically partitioned data processing system as recited in claim 5, wherein the firmware comprises a read-only memory.

7.   The logically partitioned data processing system as recited in claim 5, wherein the firmware comprises a programmable read-only memory.

8.   The logically partitioned data processing system as recited in claim 5, wherein the firmware comprises an erasable programmable read-only memory.

9.   The logically partitioned data processing system as recited in claim 5, wherein the firmware comprises an electrically erasable programmable read-only memory.

10.   The logically partitioned data processing system as recited in claim 5, wherein the firmware comprises a non-volatile random access memory.

11.   A method of providing separate copies of shared resources to each of multiple partitions within a data processing system, the method comprising:
       receiving, at a hypervisor, a message from a one of a plurality of operating system images, executing within

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the data processing system, intended for a shared
resource;

determining an identity of the one of the plurality
of operating system images;

5   encoding the message and the identity into a new
message; and

transmitting the new message to an external data
processing system for presentation to a user.

10   12.   The method as recited in claim 11, wherein the
shared resource is an operator panel.

13.   The method as recited in claim 11, wherein the
shared resource is a system console.

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14.   The method as recited in claim 11, further
comprising:

receiving external data from the external data
processing system;

20   decoding the external data to determine an input, an
identity of the shared resource, and an intended one of
the plurality of operating system images; and

transmitting the input to the intended one of the
plurality of operating system images with an indication
25   the identity of the shared resource from which the input
corresponds.

15.   A computer program product for providing separate
copies of shared resources to each of multiple partitions
30   within a data processing system, the computer program
product comprising:

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first instructions for receiving, at a hypervisor, a message from a one of a plurality of operating system images, executing within the data processing system, intended for a shared resource;

5 second instructions for determining an identity of the one of the plurality of operating system images;

third instructions for encoding the message and the identity into a new message; and

fourth instructions for transmitting the new message
10 to an external data processing system for presentation to a user.

16. The computer program product as recited in claim 15, wherein the shared resource is an operator panel.
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17. The computer program product as recited in claim 15, wherein the shared resource is a system console.

18. The computer program product as recited in claim 15,
20 further comprising:

fifth instructions for receiving external data from the external data processing system;

sixth instructions for decoding the external data to determine an input, an identity of the shared resource,
25 and an intended one of the plurality of operating system images; and

seventh instructions for transmitting the input to the intended one of the plurality of operating system images with an indication the identity of the shared
30 resource from which the input corresponds.

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19. A system for providing separate copies of shared resources to each of multiple partitions within a data processing system, the system comprising:

first means for receiving, at a hypervisor, an
5   message from a one of a plurality of operating system images, executing within the data processing system, intended for a shared resource;

second means for determining an identity of the one of the plurality of operating system images;

10   third means for encoding the message and the identity into a new message; and

fourth means for transmitting the new message to an external data processing system for presentation to a user.

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20. The system as recited in claim 19, wherein the shared resource is an operator panel.

21. The system as recited in claim 19, wherein the
20   shared resource is a system console.

22. The system as recited in claim 19, further comprising:

fifth means for receiving external data from the
25   external data processing system;

sixth means for decoding the external data to determine an input, an identity of the shared resource, and an intended one of the plurality of operating system images; and

30   seventh means for transmitting the input to the intended one of the plurality of operating system images with an

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indication the identity of the shared resource from which the input corresponds.

23.   A system for partitioning shared resources, the
5   system comprising:
a first data processing system comprising:
a plurality of partitions each corresponding to separate one of a plurality of operating system images;
10   a plurality of assignable resources; and
a hypervisor for providing each partition a separate one of a shared system resource;
a second data processing system coupled to the first data processing system, wherein the second data
15   processing system receives a message from the hypervisor, wherein the message indicates to which of the plurality of operating system images the message belong, and wherein the second data processing system displays the message to a user with an indication of the operating
20   system image corresponding to the message.

24.   The system as recited in claim 23, wherein the data processing system, responsive to operator input for a specified one of the plurality of operating system
25   images, sends encapsulated data, comprising the operator input and an indication of the corresponding operating system image, to the hypervisor, and wherein the hypervisor decodes the encapsulated data and sends the operator input to the corresponding operating system
30   image.